UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

24498

7590

08/06/2009

Thomson Licensing LLC P.O. Box 5312 Two Independence Way PRINCETON, NJ 08543-5312

EXAMINER				
PUNNOOSE, ROY M				
ART UNIT PAPER NUMBER				
2886				

DATE MAILED: 08/06/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,536	07/10/2006	Joachim Knittel	PD040007	5918

TITLE OF INVENTION: METHOD FOR DETERMINING SPHERICAL ABERRATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	11/06/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) 24498 7590 08/06/2009				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
Thomson Licensing LLC P.O. Box 5312 Two Independence Way				State	reby certify that the es Postal Service we essed to the Mail	is Fee(vith suf . Stop	of Mailing or Trans s) Transmittal is bein ficient postage for fir ISSUE FEE address 1) 273-2885, on the c	g deposited v st class mail above, or b	in an envelope being facsimile
PRINCETON, N	NJ 08543-5312								(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONFIRM	ATION NO.
10/585,536	07/10/2006	EDMINING CRITERIOAL	Joachim Knittel				PD040007	59	918
TITLE OF INVENTION	N: METHOD FOR DETE	ERMINING SPHERICAL	, ABERRATION						
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE I) I IE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DA	TE DUE
nonprovisional	NO NO	\$1510	\$300	,cL	\$0		\$1810		/06/2009
		ART UNIT	CLASS-SUBCLASS	,	9 0		\$1610	11/	100/2009
PLINNOOS	SE, ROY M	2886	356-239200	<u> </u>					
1. Change of correspond	•			the n	atent front page lis	et .			
CFR 1.363).		,	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys 1						
	oondence address (or Cha B/122) attached.		or agents OR, alter (2) the name of a		•	. memb	er a 2		
"Fee Address" inc PTO/SB/47; Rev 03-0 Number is required	lication (or "Fee Address 02 or more recent) attack •	" Indication form ned. Use of a Customer	registered attorney or agent) and the names of up to						
3. ASSIGNEE NAME A	AND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print o	or typ	e)				
PLEASE NOTE: Un recordation as set fort	less an assignee is ident th in 37 CFR 3.11. Com	ified below, no assignee pletion of this form is NO	data will appear on t T a substitute for filing	he pa	ntent. If an assign	ee is io	lentified below, the d	ocument has	been filed for
(A) NAME OF ASSI	•	P1011011 01 11110 101111 10 1 1 0	`	(CITY and STATE OR COUNTRY)					
Please check the appropr	riate assignee category or	categories (will not be pr	rinted on the patent):		Individual 🖵 Co	orporati	on or other private gr	oup entity	Government
4a. The following fee(s)	are submitted:	41	b. Payment of Fee(s):	(Plea	se first reapply ar	ıy prev	iously paid issue fee	shown abov	e)
Issue Fee			A check is enclosed.						
	No small entity discount # of Copies		☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any					aradit any	
Advance Order -	# of Copies						(enclose a		
5. Change in Entity Sta		/							
	ns SMALL ENTITY state	us. See 37 CFR 1.27. uired) will not be accepte					ΓΙΤΥ status. See 37 C		
interest as shown by the	records of the United Sta	ites Patent and Trademark	Coffice.	nan u	е аррисані, а теді	siereu .	attorney of agent, or the	ne assignee o	other party in
Authorized Signature					Date				
Typed or printed name			Registration No.						
an application Confider	itiality is governed by 35	CFR 1.311. The information U.S.C. 122 and 37 CFR	1.14 This collection i	ie eeti	imated to take 12 i	minutes	to complete includi	o gathering	preparing and
submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	d application form to the ions for reducing this bu Virginia 22313-1450. DO	e USPTO. Time will vary rden, should be sent to th D NOT SEND FEES OR	depending upon the de Chief Information COMPLETED FORM	indiv Office IS TO	idual case. Any co r, U.S. Patent and D THIS ADDRESS	mment Traden S. SEN	s on the amount of tinark Office, U.S. Dep D TO: Commissioner	me you requi artment of C for Patents, I	ire to complete commerce, P.O. P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/585,536	07/10/2006	Joachim Knittel	PD040007	5918	
24498 75	90 08/06/2009		EXAM	INER	
Thomson Licensi	ng LLC		PUNNOOS	E, ROY M	
P.O. Box 5312			ART UNIT	PAPER NUMBER	
Two Independence			2886		
PRINCETON, NJ	00343-3312		DATE MAILED: 08/06/200	9	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 696 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 696 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)				
	10/585,536	KNITTEL, JOACHIM				
Notice of Allowability	Examiner	Art Unit				
	ROY PUNNOOSE	2886				
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to and MPEP 1308.	olication. If not included will be mailed in due course. THIS				
1. This communication is responsive to papers filed on 07/10/	<u>/2006</u> .					
2. ☑ The allowed claim(s) is/are <u>8-11</u> .						
 3. Acknowledgment is made of a claim for foreign priority una) a) All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	been received. been received in Application No					
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements				
 A SUBSTITUTE OATH OR DECLARATION must be submi INFORMAL PATENT APPLICATION (PTO-152) which give 						
5. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.					
(a) \square including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO-	948) attached				
1) ☐ hereto or 2) ☐ to Paper No./Mail Date						
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the O	office action of				
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t						
DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT.						
Attachment(s)	5 DNatter of Information	atant Annilastian				
 Notice of References Cited (PTO-892) D Notice of Draftperson's Patent Drawing Review (PTO-948) 	5. ☐ Notice of Informal Page 16. ☐ Interview Summary					
 Information Disclosure Statements (PTO/SB/08), 	6. ☐ Interview Summary Paper No./Mail Dat 7. ☑ Examiner's Amendn	e				
Paper No./Mail Date <u>07/10/2006</u> 4. ☐ Examiner's Comment Regarding Requirement for Deposit						
. ☐ Examiner's Comment Regarding Requirement for Deposit 8. ☐ Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other						
	<u> </u>					

Application/Control Number: 10/585,536 Page 2

Art Unit: 2886

DETAILED ACTION

Examiner's Amendment

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this Examiner's amendment was given in a telephone interview with **Attorney Patricia A. Verlangieri** (Reg. No. 42,201) on 07/30/2009.

- 2. The Examiner's amendment was done to correct the dependency of claim 9 and cancel claim 12. Attorney Patricia A. Verlangieri authorized the Examiner to amend claim 9 to depend on claim 8. Upon indicating that claim 12 does not further limit the structure of its parent claim, claim 8, Attorney Verlangieri authorized the Examiner to cancel claim 12.
- 3. In addition to the amendment of the claims as above, the Examiner has amended the specification to include certain sub-headings as indicated below.

The application has been amended as follows:

- a. In claim 9, line 1, "claim 9" has been deleted and --claim 8-- has been inserted therein.
- b. Claim 12 has been cancelled.
- c. In the specification, on page 1, the sub-heading --FIELD OF THE INVENTION-has been inserted on line 2.
- d. In the specification, on page 1, the sub-heading --BACKGROUND OF THE INVENTION-- has been inserted on line 8.

Application/Control Number: 10/585,536 Page 3

Art Unit: 2886

e. In the specification, on page 2, the sub-heading --SUMMARY OF THE INVENTION-- has been inserted on line 5.

- f. In the specification, on page 5, the sub-heading --BRIEF DESCRIPTION OF THE DRAWINGS-- has been inserted on line 15.
- g. In the specification, on page 6, the sub-heading --DETAILED DESCRIPTION OF THE INVENTION-- has been inserted on line 8.

Allowable Subject Matter

- 4. Claims 8-11 are allowable.
- 5. Claims 8 and 10 are allowable because, prior art of record taken alone or in combination, fails to disclose or render obvious a method and apparatus for determining spherical aberration in a light beam comprising a volume hologram having stored wavefront patterns with various degrees of spherical aberration for splitting the light beam into at least two partial light beams, in combination with the rest of the limitations of claims 8 and 10.
- 6. Claims 9 and 11 are allowable because they are dependent on claim 8 or 10.
- 7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact/Status Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Roy M. Punnoose** whose telephone number is **(571)272-2427**. The examiner can normally be reached on 9:30 AM - 6:00 PM.

Application/Control Number: 10/585,536 Page 4

Art Unit: 2886

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur R. Chowdhury can be reached on 571-272-2287. The **Fax number** for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy M. Punnoose/ Primary Examiner Art Unit 2886